

## **SURFACE PREPARATION AND PAINTING REQUIREMENTS FOR WEATHERING STEEL**

Effective: November 21, 1997

Revised: December 12, 2005

Description. This work consists of surface preparation of structural steel on bridges built with AASHTO M270M Grade 345W (AASHTO Grade 50W) weathering steel. Also included is the protection and cleaning of the substructure.

Paint systems. When field painting of the structural steel or portions thereof is specified on the plans it shall be according to the Special Provision for "Cleaning and Painting New Metal Structures" except as modified herein.

- a) Shop and Field Applied Paint System. When the primer is to be shop applied and the intermediate and top coats field applied the Inorganic Zinc Rich/ Acrylic/ Acrylic Paint System shall be used.
- b) Shop Applied Paint System. When the primer, intermediate and top coats are all to be shop applied the Organic Zinc Rich/ Epoxy/ Urethane Paint System shall be used.
- c) The galvanizing requirement of Article 506.04(j) of the Standard Specifications shall not apply to AASHTO M164 Type 3 bolts.
- d) All materials for the paint system used shall be supplied by the same paint manufacturer. The color of the finish coat supplied shall match the Federal Color Standard 595a 20045.

### **Construction Requirements**

Surface Preparation. All steel shall be cleaned of any surface contamination according to SSPC-SP1 (Solvent Cleaning) and then given a blast cleaning according to SSPC-SP6 (Commercial Blast Cleaning) except areas to be painted shall be given a blast cleaning according to SSPC-SP10 (Near-White Blast Cleaning).

Water Washing. After blasting and painting, all areas of the steel to remain unpainted shall be sprayed with a stream of potable water to ensure uniform weathering.

Protection and Cleaning of Substructure. The piers and abutments shall be protected during construction to prevent rust staining of the concrete. This can be accomplished by temporarily wrapping the piers and abutments with polyethylene covering. Any rust staining of the piers or abutments shall be cleaned to satisfaction of the Engineer after the bridge deck is complete.

Basis of Payment. Surface preparation of structural steel, protection and cleaning of the substructure and painting of structural steel when specified will be considered as included in the cost for fabrication and erection of structural steel and will not be paid for separately.